

## Service Transactions in the U.S. International Accounts, 1970-80

**T**HIS article analyzes developments in service transactions in the U.S. international accounts in 1970-80—a decade of unprecedented expansion in these transactions. Service exports increased at an average annual rate of 19 percent, to \$121 billion in 1980; service imports increased at a rate of 16 percent, to \$85 billion (table 1). By 1980, the surplus on these transactions reached \$36 billion, more than offsetting a deficit of \$25 billion on merchandise trade transactions (chart 2).

Receipts (exports) of income on U.S. investment abroad and payments (imports) of income on foreign investment in the United States increased at a substantially faster rate than receipts and payments for other services (table 2). Receipts and payments of income on U.S. bank-reported transactions increased most strongly in 1973-74 and 1978-80, as a result of significant increases in both U.S. interest rates and the volume of bank transactions. Receipts and payments of income on direct investment increased at a slower rate than income on bank-reported investments; particularly sharp increases in U.S. direct investment income receipts were associated with the jump in petroleum prices in 1973-74 and 1979-80.

Receipts and payments for other services, such as travel, passenger fares, transportation, royalties and fees, and military services, showed smaller changes over the period. Receipts generally increased faster than payments, and the balance on these transactions shifted from a deficit to a surplus over the decade.

*Service transactions in the U.S. international accounts.*—Service transac-

tions in the U.S. international accounts include all current-account transactions except merchandise trade and unilateral transfers. Transactions record the value of services exchanged between U.S. and foreign residents. They are grouped into the following major categories, each of which is discussed in turn in this article: U.S. Government transactions, military and nonmilitary; travel; passenger fares; transporta-

tion; royalties and fees; private miscellaneous services, such as reinsurance, technical services, and communications; and income on investment—direct, other private, and U.S. Government.

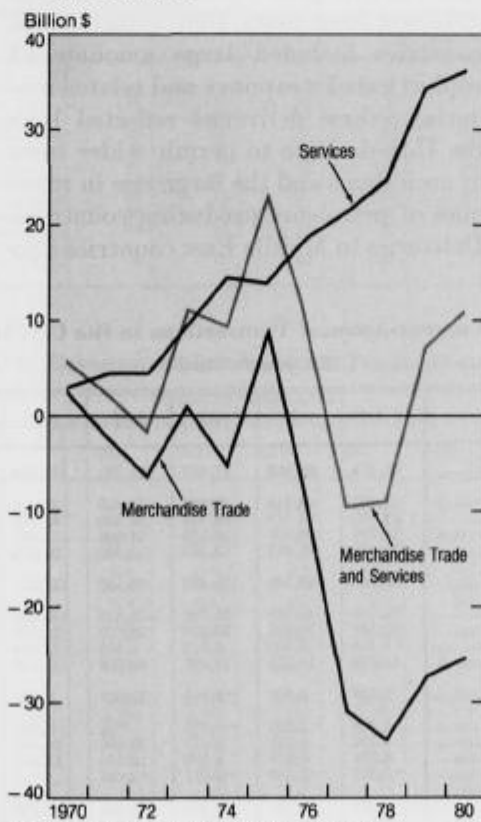
*Data coverage and limitations.*—In the U.S. international accounts, estimates of the value of service transactions between the United States and the rest of the world are based mostly on data from other U.S. Government agencies and private sources. BEA adjusts the data to conform to definitions and concepts of the international accounts and also of the national income and product accounts, of which service transactions are a component. Also, BEA collects primary source data when appropriate data are not available from other sources.

Some "service" transactions include goods (merchandise) as well, because it is not always logical or feasible to separate these comingled transactions, and transactors often do not keep accounting records on the valuation of separate parts. The coverage of service transactions in the international accounts is limited in some cases because existing records do not provide sufficient information to prepare reasonable estimates or transactions are not covered by the reporting system.

### U.S. Government Transactions

International transactions of the U.S. Government reflect the Government's activities in implementing certain foreign policies and in performing traditional governmental functions, such as providing national defense and

CHART 2  
U.S. Balances on Merchandise Trade and Services



U.S. Department of Commerce, Bureau of Economic Analysis

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maintaining diplomatic relations. In the U.S. international accounts, Government transactions, except investment income transactions, are classified either as transactions by defense agencies—the Department of Defense (DOD) and the U.S. Coast Guard—or as transactions by all other agencies. Government investment income is discussed in the section on investment income.

### Transactions of defense agencies

**Exports.**—Exports of defense agencies consist almost entirely of transfers under U.S. military agency sales contracts. These transfers are deliveries of goods and services provided to foreign governments by U.S. defense agencies, for cash and credit, under the foreign military sales (FMS) program. The FMS program, established in 1960, was designed to assist U.S. allies—mainly NATO countries—in purchasing and standardizing military equipment within NATO. However, participation in the program has not been limited to NATO countries.<sup>1</sup>

Exports of defense agencies were \$8.2 billion in 1980, compared with \$1.5 billion in 1970; the average annual rate of increase was 22 percent. There was a

surge in deliveries in 1973-78, which was related to the 1973 Arab-Israeli War and subsequent developments in the Middle East. Partly as a result, the share of deliveries to NATO countries declined sharply; however, in 1980, it increased substantially because of initial deliveries of the F-16 aircraft. Although weaponry—aircraft, missiles, arms, and tanks and other military vehicles—constituted the majority of deliveries during the decade, deliveries for construction projects and technical assistance increased strongly in the last half (table 8). The latter deliveries were mainly to many of the same Middle East countries that began receiving stepped-up arms shipments in 1973.

The large increase in deliveries in 1973 was almost entirely due to the replacement of Israeli military equipment that had been lost in the 1973 Arab-Israeli War. Large deliveries in subsequent years were directed toward maintaining and improving the quality of military equipment. Deliveries to Iran, until the change of Government there in February 1979, to Saudi Arabia, and, to a lesser extent, to Jordan and Kuwait also showed increases in 1974 and later years. Deliveries to these countries included large amounts of sophisticated weaponry and related materials; these deliveries reflected both the U.S. decision to permit wider sales of such items and the large rise in revenues of petroleum-producing countries. Deliveries to Middle East countries also

included large amounts of construction projects and other technical assistance projects related to economic as well as military development. The projects included construction of airfields, deep-water port facilities, roads, housing, hospitals, and schools. These deliveries—mostly to Saudi Arabia—were the primary reason for the large increase in construction and related services since 1976. Deliveries to the Middle East dropped sharply in 1979 because of the halt in those to Iran after the first quarter.

Compared with the striking increase in deliveries to the Middle East, deliveries to NATO countries, mainly weaponry, increased slowly over the decade. After increasing to only \$1.4 billion in 1979, deliveries almost doubled in 1980, reaching \$2.5 billion. The sharp increase reflected the initial deliveries of high-value, high-technology F-16 aircraft. Excluding the F-16, other deliveries increased at about 9 percent each year over the decade, only slightly more than the 6-percent annual increase in the prices of military equipment, as estimated by BEA.

Deliveries to Korea, Taiwan, the Philippines, and other Southeast Asian countries increased from \$0.1 billion in 1970 to almost \$1.0 billion in 1980. This increase partly reflected the rising economic prosperity of those countries. Until the mid-1970's, these deliveries were financed primarily by U.S. military aid and were included in transfers

Table 1.—Summary of Current-Account Transactions in the U.S. International Accounts

(Millions of dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Exports of goods and services.....	65,674	68,838	77,465	110,241	146,646	155,729	171,838	184,295	221,021	238,925	344,667
Merchandise.....	42,469	43,319	49,341	71,410	88,206	107,063	114,745	120,916	142,854	164,473	223,090
Services.....	23,205	25,519	28,124	38,830	48,440	48,666	57,093	63,379	78,167	104,452	120,703
Investment income.....	11,747	12,787	14,701	21,808	27,587	25,351	29,265	32,179	43,265	66,689	73,856
Other services and related goods.....	11,453	12,812	13,300	17,002	29,773	22,291	27,549	33,300	35,704	37,781	44,707
Imports of goods and services.....	60,059	61,409	70,485	100,219	137,357	129,530	162,348	193,788	230,030	281,917	333,888
Merchandise.....	39,866	45,479	55,707	79,499	103,840	93,041	124,053	151,680	175,813	211,819	249,309
Services.....	20,193	20,931	23,039	28,721	25,706	34,783	38,197	42,100	54,217	70,099	84,580
Investment income.....	5,516	5,456	5,572	9,355	12,864	12,564	13,911	14,217	21,865	33,276	40,174
Other services and related goods.....	14,679	15,345	17,067	19,066	21,524	22,221	24,895	27,863	33,332	39,693	41,106
Balance on goods and services (exports less imports).....	5,615	7,429	6,980	9,022	9,289	26,199	9,490	90,507	90,991	57,008	110,779
Merchandise.....	2,603	2,280	2,418	912	14,365	14,022	10,692	29,265	27,041	22,664	73,781
Services.....	3,012	3,449	4,562	9,110	14,924	12,177	18,500	41,242	63,950	34,344	37,000
Investment income.....	6,231	7,271	8,103	12,353	15,693	12,787	15,075	17,082	21,400	33,463	32,782
Other services and related goods.....	-3,212	-2,743	-3,717	-2,094	-511	1,060	2,712	3,417	2,352	501	3,351
Unilateral transfers, net.....	-3,294	-4,791	-3,854	-3,281	-7,136	-4,513	-4,005	-4,047	-5,067	-5,595	-7,035
Balance on current account (exports less imports and unilateral transfers).....	2,321	2,638	3,126	5,741	2,153	21,686	5,485	86,460	85,924	51,413	103,744

1. For details, see Walter G. Kestly, Jr. and Rodney D. Thorn, "Military Transactions in the U.S. International Accounts, 1972-77" *SURVEY OF CURRENT BUSINESS* (May 1978): 23-37.

Table 2.—Major Types of U.S. Service Transactions

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average Annual Change 1970-80
<b>Exports</b>												
Millions of dollars												
U.S. Government transactions.....	1,882	2,273	1,781	2,980	3,799	4,485	5,043	7,008	8,710	7,129	8,648	676
Travel.....	2,331	2,334	2,817	3,412	4,026	4,697	5,742	6,159	7,186	8,383	10,090	778
Passenger fares.....	554	515	609	975	1,104	1,039	1,229	1,356	1,606	2,136	2,582	204
Transportation.....	3,125	3,299	3,579	4,483	5,497	5,840	6,747	7,284	8,813	9,889	11,490	881
Royalties and fees.....	2,331	2,645	2,770	3,225	3,621	3,800	4,353	4,805	5,780	6,049	6,985	453
Private miscellaneous services.....	1,294	1,240	1,794	1,885	2,321	2,829	3,584	3,806	4,130	4,187	5,207	391
Income on investment.....	11,747	12,707	14,784	21,888	27,587	25,351	28,236	32,179	43,245	45,699	75,936	6,419
Direct investment.....	8,168	9,160	10,049	16,542	19,167	16,800	18,990	19,673	25,436	26,322	36,842	2,897
Other private.....	2,671	2,641	2,949	4,330	7,356	7,644	8,936	10,691	16,904	28,075	38,523	3,886
U.S. Government.....	997	906	966	936	1,074	1,172	1,333	1,625	1,813	2,294	2,572	157
Total.....	23,295	24,819	26,184	38,859	48,390	49,442	56,384	63,479	78,969	104,493	128,793	2,780
Percent change												
U.S. Government transactions.....	24	-24	72	38	18	32	33	10	-13	21	20	
Travel.....	9	11	21	18	10	22	7	17	20	21	16	
Passenger fares.....	13	14	39	13	-4	18	11	17	34	28	17	
Transportation.....	6	8	26	28	3	16	8	14	19	15	17	
Royalties and fees.....	0	0	16	18	13	1	10	20	5	14	12	
Private miscellaneous services.....	19	13	13	17	20	23	6	9	1	24	15	
Income on investment.....	8	10	48	28	-8	18	10	34	54	14	22	
Direct investment.....	12	10	61	16	-13	14	4	29	51	-4	18	
Other private.....	-1	12	47	20	4	17	22	47	63	40	23	
U.S. Government.....	-	-4	8	15	4	20	22	13	38	12	11	
Total.....	79	10	38	25	1	17	12	24	32	26	19	
<b>Imports</b>												
Millions of dollars												
U.S. Government transactions.....	4,880	5,353	5,672	5,491	5,989	5,839	6,122	7,181	8,697	10,274	12,515	894
Travel.....	3,080	4,273	4,042	5,021	5,080	6,417	6,356	7,451	8,476	9,413	10,967	612
Passenger fares.....	1,215	1,280	1,346	1,799	2,036	2,263	2,368	2,748	2,996	3,184	3,697	230
Transportation.....	2,865	2,993	2,696	3,222	3,044	4,154	4,088	4,703	5,480	6,229	7,270	482
Royalties and fees.....	225	241	284	385	340	473	483	436	507	587	700	84
Private miscellaneous services.....	837	958	1,043	1,180	1,202	1,251	2,006	2,100	2,596	2,820	3,222	240
Income on investment.....	5,518	5,430	5,572	9,035	12,064	12,464	13,311	14,217	21,805	33,230	43,174	8,786
Direct investment.....	575	1,104	1,294	1,830	1,331	2,234	2,119	3,824	4,211	6,387	6,306	846
Other private.....	2,017	2,428	2,694	4,206	6,491	5,795	5,681	5,841	8,963	16,803	21,230	1,771
U.S. Government.....	1,034	1,844	2,084	3,836	4,269	4,543	4,320	4,643	5,674	11,076	12,312	1,166
Total.....	20,186	20,993	20,839	28,731	33,798	34,795	38,197	43,108	54,217	70,099	84,588	6,439
Percent change												
U.S. Government transactions.....	10	13	-2	9	-3	5	17	24	15	22	9	
Travel.....	6	34	12	17	8	13	7	14	11	10	10	
Passenger fares.....	10	13	23	27	-4	20	16	13	17	13	12	
Transportation.....	7	23	31	-10	37	2	-9	38	26	2	15	
Royalties and fees.....	16	8	13	7	23	23	9	17	10	14	15	
Private miscellaneous services.....	-2	31	47	26	4	0	0	64	82	30	24	
Income on investment.....	23	10	22	-17	06	39	-9	49	51	47	30	
Direct investment.....	-33	7	62	64	-11	-1	2	54	16	26	25	
Other private.....	98	40	40	11	7	-1	23	57	28	19	23	
U.S. Government.....	4	83	22	17	3	14	14	29	29	21	96	

Table 3.—U.S. Government International Transactions, by Type<sup>1</sup>

(Millions of dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Exports</b>											
Defense agencies—transfers under military sales contracts	1,591	1,026	1,364	2,338	2,970	4,019	5,484	7,351	8,090	8,000	8,231
Aircraft, missiles, vehicles, other armaments, and related services	n.a.	n.a.	891	1,972	2,065	3,043	4,074	5,004	4,901	3,815	4,098
Other goods and services	n.a.	n.a.	483	587	714	966	1,880	2,347	2,189	3,204	3,533
Construction and related services	n.a.	n.a.	79	130	143	185	462	605	1,207	1,355	1,405
Other	n.a.	n.a.	410	451	571	801	1,118	1,652	1,792	1,730	2,128
Other Government agencies	389	347	357	401	419	446	489	567	630	520	382
<b>Imports</b>											
Defense agencies—direct defense expenditures	4,855	4,818	4,784	4,620	5,032	4,783	4,985	5,823	7,352	8,580	10,740
U.S. personnel expenditures	1,831	1,907	1,730	1,605	1,518	1,374	1,238	1,433	1,356	1,591	1,600
Hire of foreign personnel and contractual services	1,777	1,781	1,856	1,970	2,004	2,119	2,063	2,321	3,138	3,297	3,474
Equipment, supplies, and materials	887	882	1,013	927	1,330	1,200	1,210	1,233	1,850	2,291	3,491
Petroleum products	470	408	482	399	801	670	508	617	682	1,158	3,351
Other	817	488	531	828	535	630	643	649	968	1,133	1,590
Construction	260	220	170	117	114	102	414	611	1,118	1,357	1,481
Other Government agencies	735	745	788	953	907	1,044	1,227	1,348	1,545	1,718	1,700

n.a. Not available.

1. Does not include Government income receipts and payments, which are included with other types of investment income.

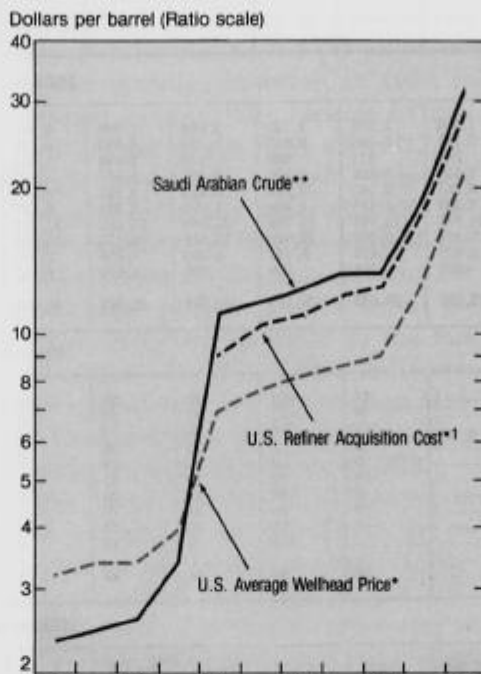
under U.S. military grant programs. Since the mid-1970's, a larger share has been financed through commercial channels.

**Imports.**—Imports of the defense agencies, referred to as direct defense expenditures in the international accounts, consist of expenditures for goods and services purchased abroad by DOD and the U.S. Coast Guard. They include overseas expenditures of DOD personnel, goods purchased abroad by DOD, payments for the hire of foreign personnel, overseas expenditures by U.S. and foreign contractors hired by DOD, and U.S. payments to the commonly funded NATO infrastructure program.

Direct defense expenditures rose to \$10.7 billion in 1980 from \$4.9 billion in 1970; the average annual rate of increase was 9 percent. In 1970-76, declines in expenditures associated with the withdrawal from Vietnam virtually offset increases elsewhere. U.S. personnel expenditures and other expenditures in Vietnam, Thailand, Japan, and Korea related to the Vietnam War declined as U.S. troops were withdrawn from Vietnam. This decline was offset by increases in other expenditures, largely because of the depreciation of the dollar, particularly against the German mark and the Japanese yen in 1971 and 1973, and to a lesser extent, inflation in countries where expenditures were the largest—Germany, the United Kingdom, Italy, and Japan. In 1977-80, worldwide expenditures doubled due to stepped-up commitments to NATO, an increase in expenditures for reimbursable Middle East construction projects associated with FMS deliveries to that area, and a combination of dollar depreciation and foreign inflation.

Expenditures for petroleum products were boosted by the steep petroleum price increases in 1973-74 and 1979-80. Following the earlier increases there was some substitution of lower priced domestic source products. There was little or no substitution following the later increases because, with the beginning of deregulation of U.S. crude prices in 1979, U.S. petroleum prices rapidly approached foreign prices (chart 3).

### Prices of Crude Petroleum



1. Average cost of domestic and foreign crude petroleum. Series available from 1974 only.

\*Data: U.S. Department of Energy

\*\*Data: United Nations Statistical Office

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### Transactions of other Government agencies

**Exports.**—Exports include receipts for services such as the launching of space satellites, enrichment of uranium for power plants, and postal services. Also included are toll receipts from the use of the U.S. portion of the St. Lawrence Seaway and, until 1979, the use of the Panama Canal. Finally, the value of administrative services provided by agencies that administer nonmilitary foreign assistance programs is included.

After increasing steadily in 1970-78, exports declined in 1979-80 because Panama Canal toll fees were removed from the accounts after the Canal was turned over to the Republic of Panama in October 1979. Panama Canal toll receipts previously accounted for about one-third of total receipts. Administrative services provided in connection with foreign assistance by the Agency for International Development and the Peace Corps accounted for about one-third of the remainder of receipts; re-

ceipts for these services changed little in the decade.

**Imports.**—Imports include the cost of establishing and maintaining U.S. embassies and consulates abroad, expenditures of U.S. personnel employed abroad by nonmilitary agencies, membership fees paid to international organizations, payments for postal and other services, expenditures for maintenance of the Panama Canal (until the end of 1979), and contributions to worldwide peacekeeping operations.

Imports increased to \$1.8 billion in 1980, from \$0.7 billion in 1970; the increase mainly reflected the higher cost of maintaining U.S. embassies abroad. About one-half of the increase in total outlays reflected higher salaries paid to U.S. personnel, higher costs due to inflation abroad, and appreciation of foreign currencies. Payments to international organizations, such as the United Nations and affiliated organizations, the Organization for Economic Cooperation and Development, and the Organization of American States, accounted for most of the remainder, and largely reflected increases in membership assessments. In 1978-80, contributions to worldwide peacekeeping operations were also significant.

### Travel, Passenger Fares, and Transportation

#### Travel

Travel includes transactions in a variety of services and related goods by individuals residing for less than one year in a foreign country for business, education, vacation, or other personal reasons. Transactions of U.S. Government personnel stationed overseas and foreign government personnel stationed in the United States are excluded, but transactions of government and international organization personnel on official travel are included. The types of services and goods most likely to be purchased by travelers are lodging, meals, entertainment, transportation within the country or area visited, gifts, souvenirs, and articles for personal use, except automobiles.

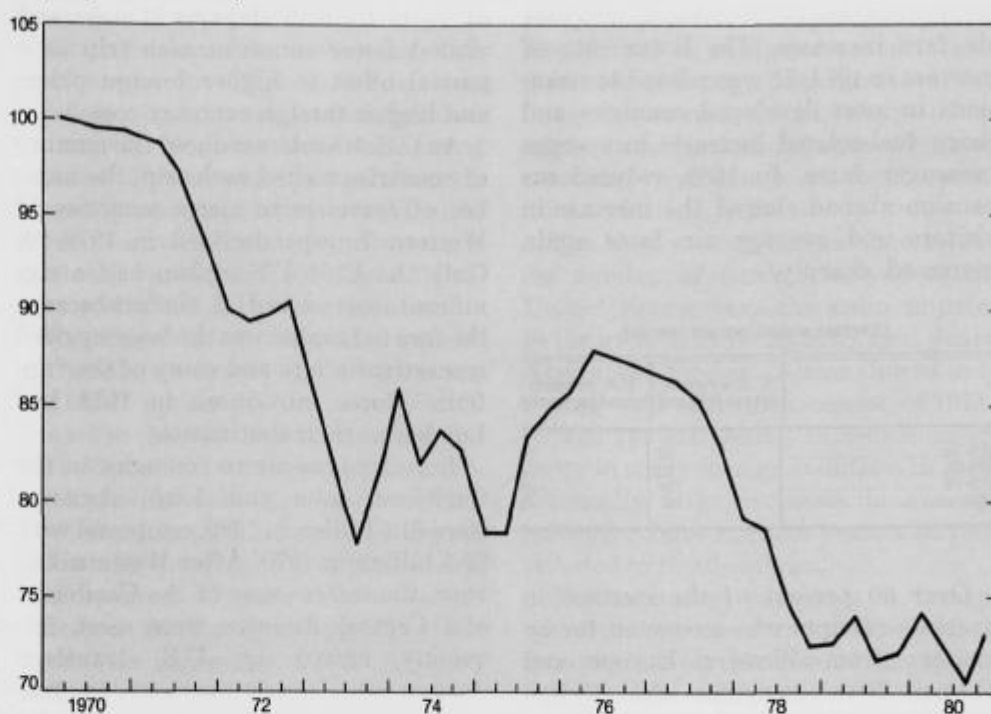


U. S. receipts from foreign visitors to the United States (exports) increased more rapidly than payments by U.S. travelers abroad (imports). U.S. receipts increased at an average annual rate of 16 percent, compared with 10 percent for payments. U.S. travel receipts were \$10.1 billion in 1980, compared with \$2.3 billion in 1970. In 1980, receipts were about evenly divided between receipts from overseas visitors and from Canadian and Mexican visitors; in 1970, receipts from overseas visitors were 38 percent of the total. Payments were \$10.4 billion in 1980, compared with \$4.0 billion in 1970. Overseas travel was about 58 percent of the total in 1980, only slightly more than in 1970.

*Overseas.*—Over the decade, a rise in the value of many foreign currencies, a slower average increase in inflation in the United States than overseas, and a rise in real incomes in many foreign countries encouraged foreign travelers to visit the United States and boosted U.S. receipts. U.S. payments for travel overseas increased also, but at a slower pace, because higher inflation rates overseas than in the United States and higher foreign currency costs deterred U.S. residents from traveling abroad, particularly to Western Europe.

Receipts from overseas visitors were \$5.1 billion in 1980, compared with \$0.9 billion in 1970; the average annual rate of increase was 19 percent (table 4). Payments by U.S. travelers overseas were \$6.0 billion, compared with \$2.2 billion, and increased 11 percent annually. In 1970, the number of visitors from overseas was less than one-half

Index of Foreign Currency Price of the U.S. Dollar  
(May 1970=100)



Note.—Price is the trade-weighted average against the currencies of Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, and the United Kingdom. Data are quarterly averages.

Data: Federal Reserve Board, rebased by BEA

U.S. Department of Commerce, Bureau of Economic Analysis

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the number of U.S. travelers overseas—2.3 million and 5.3 million, respectively. By 1980, the number of visitors from overseas more than tripled to 7.7 million, and was almost as large as the number of U.S. travelers overseas—8.2 million. Average expenditures of overseas visitors increased 5.5 percent annually; those of U.S. travelers overseas increased 6 percent annually.

During the past decade, the disparity in growth rates between overseas travel

receipts and payments was largely attributable to exchange rate developments. The general decline in the value of the dollar moderated the increases in U.S. prices from the viewpoint of foreign travelers whose currencies appreciated against the dollar—particularly Western European and Japanese travelers (chart 4). From the U.S. traveler's viewpoint, that same decline also had the effect of accentuating foreign price increases. For foreign visitors, the effective average annual increase in U.S. prices was about 5 percent, compared with an average increase of 8 percent in the U.S. Consumer Price Index (CPI) and, more importantly, with about 9 percent in the consumer price indexes of other developed countries. Thus, for many foreign travelers, the United States was a less expensive destination than other developed countries during most of 1970-80.

Rising real incomes and only moderate increases in average passenger fares in most years also encouraged foreign

Table 4.—U.S. International Travel Transactions

[Millions of dollars]

	Receipts			Payments		
	Total	Overseas	Canada and Mexico	Total	Overseas	Canada and Mexico
1970	2,331	889	1,442	3,980	2,184	1,796
1971	2,534	965	1,569	4,373	2,335	2,038
1972	2,817	1,189	1,648	5,042	2,870	2,172
1973	3,412	1,510	1,902	5,526	3,104	2,422
1974	4,032	1,665	2,367	5,980	3,146	2,834
1975	4,697	1,825	2,872	6,417	3,474	2,943
1976	5,742	2,395	3,347	6,856	3,762	3,094
1977	6,150	2,684	3,466	7,451	4,100	3,351
1978	7,188	3,479	3,707	8,475	4,947	3,528
1979	8,335	4,374	3,961	9,413	5,354	4,059
1980	10,090	5,108	4,982	10,397	6,016	4,381

travel to the United States. The largest increases in receipts were in 1971-73 and 1976-79, periods of strong economic expansion overseas and moderate air fare increases. The lower rate of increase in 1974-75 was related to recessions in most developed countries and sharp fuel-related increases in average passenger fares. In 1980, reduced expansion abroad slowed the increase in visitors and average air fares again increased sharply.

(Average annual percent change)

	U.S. overseas travel receipts	U.S. overseas travel payments
1971-73	20	13
1974-75	10	8
1976-79	24	13
1980	27	12

Over 50 percent of the increase in overseas receipts was accounted for by visitors from Western Europe and Japan. Five countries—the United Kingdom, Germany, France, the Netherlands, and Japan—accounted for over 40 percent. Receipts from these 5 countries increased at an average rate of 23 percent, compared with 19 percent from all overseas areas. Receipts from countries in Asia, excluding Japan, and Africa also increased rapidly—22 percent. Receipts from Latin America increased only 15 percent, reflecting smaller increases in receipts from the Caribbean area and Central America.

U.S. payments for overseas travel were \$6.0 billion in 1980, compared with \$2.2 billion in 1970. Payments increased most rapidly in years when the U.S. economy was expanding and real incomes were rising—in 1971-73 and 1976-79. Smaller increases occurred in 1974-75 and 1980 when U.S. economic growth declined and average passenger fares increased sharply.

Although payments to Western Europe were \$3.0 billion in 1980 compared with \$1.3 billion in 1970, their share of the overseas total declined from 60 percent to 50 percent. Most of the decline occurred in 1971-75. For the decade, U.S. residents were deterred by an effective average annual increase in foreign prices, to U.S. travelers, of 12 percent, compared with 8 percent in the U.S.

CPI and 9 percent in the consumer price indexes of other developed countries. U.S. travelers reduced the length of visits from 27 days to 21 days and visited fewer countries each trip as a partial offset to higher foreign prices and higher foreign currency costs.<sup>2</sup>

As U.S. travelers reduced the number of countries visited each trip, the number of travelers to many countries of Western Europe declined in 1978-80. Only the United Kingdom had a significant increase in U.S. visitors because the fare to London was the lowest priced transatlantic fare and many of the "no-frills" fares introduced in 1978 had London as their destination.

Travel payments to countries in the Caribbean area and Latin America were \$1.5 billion in 1980, compared with \$0.5 billion in 1970. After Western Europe, the resort areas of the Caribbean and Central America were most frequently visited by U.S. travelers. Among other areas, payments to Australia, New Zealand, and Israel and a few other Middle East countries increased significantly, although they remained a small part of total overseas payments. Payments to Japan and Hong Kong doubled, but they amounted to only \$0.3 billion in 1980.

*Canada and Mexico.*—Because of the proximity of Canada and Mexico, travel receipts and payments between these countries and the United States differed somewhat from overseas travel. Less costly airfares and the ease of travel by auto resulted in substantially lower transportation costs. Transactions in the border areas—an important part of total U.S. travel transactions with Canada and Mexico—often responded more rapidly than other travel transactions to changes in relative inflation rates and foreign currency costs.

Receipts from Canadian visitors were \$2.4 billion in 1980, almost triple the amount in 1970. Most of the increase occurred in 1970-76. The average annual rate of increase, which rose from 3 percent in 1971 to 27 percent in 1976, was

11 percent. Receipts slowed sharply in 1977-78 and declined in 1979 before rising again in 1980. The pattern of changes in receipts corresponded roughly with, and was partly explained by, changes in the exchange rate between the U.S. and Canadian dollars. Between July 1970 and December 1976, the value of the Canadian dollar fluctuated in a relatively narrow range from U.S. \$0.97 to U.S. \$1.03. In January 1977, the value of the Canadian dollar began to decline, reaching a low of U.S. \$0.84 in December 1979 and remained at that level in 1980.

(Average annual percent change)

	Travel receipts from Canada	Value of Canadian dollar in terms of U.S. dollar
1971-76	15	1
1977-78	2	-9
1979	-7	-8
1980	16	

Since 1977, the number of Canadian visitors on trips of less than 1 day, which accounted for over 65 percent of Canadian travel in the United States and included trips in the border area, declined an average of 4 percent annually as the value of the Canadian dollar fell and relatively high gasoline prices deterred Canadian travel in the United States. The number of visitors on trips of longer duration declined only slightly in 1978-79 and returned to the 1977 peak level by 1980. These visitors were less influenced by exchange rate developments than same-day visitors, and included an increasing number of Canadians traveling in the winter months to warmer climates of the United States.

U.S. payments to Canada were \$1.8 billion in 1980, compared with \$1.0 billion in 1970; they increased at an average annual rate of 6 percent. Payments increased in most years, but there was a continuous drop in the number of travelers since 1973, as long-distance automobile travel—trips of more than 100 miles—by U.S. residents declined. The largest increases in payments occurred in 1973-74 and 1979-80—about 14 percent in each period; they were largely related to border transactions. In the

2. For details, see Joan Deljard, "International Travel and Passenger Fares, 1970-79," *SURVEY* (May 1980): 23-34, and "International Travel and Passenger Fares, 1980," *SURVEY* (May 1981): 20-24.

earlier period, U.S. residents in the border area increased their purchases of gasoline in nearby Canadian locations because of supply shortages in the United States and long waiting lines at U.S. service stations. In the latter period, significantly lower Canadian gasoline prices and the rising value of the U.S. dollar were strong incentives for U.S. border residents to shift their purchases of gasoline and other commodities to nearby Canadian locations.

Receipts from Mexico were \$2.6 billion in 1980, compared with \$0.6 billion in 1970; they increased at an average annual rate of 17 percent. Fluctuations in receipts during the decade were strongly influenced by exchange rate developments. Receipts for travel beyond the border area increased faster than receipts in the border area. In 1980, border area receipts were 65 percent of total receipts from Mexico; they were almost 90 percent in 1970.

Receipts increased rapidly in 1971-75, slowed considerably in 1976, and then declined in 1977 when the peso was devalued 40 percent against the U.S. dollar in 1976 and an additional 8 percent in 1977. Growth resumed in 1978-80 as the exchange rate stabilized and as the Mexican inflation rate outpaced the U.S. rate, causing Mexicans to shift some purchases of goods and services to the U.S. border area, where the local U.S. and Mexican economies are closely integrated. Receipts from travel beyond the border area were also especially strong in 1978-80; they rose 20 percent annually partly reflecting the booming Mexican economy.

(Average annual percent change)

	Travel transactions with Mexico		Value of Mexican peso in terms of U.S. dollar
	U.S. receipts	U.S. payments	
1971-72	11	21	
1973-75	23	13	
1976	4	3	-40
1977	-	11	-8
1978-80	20	18	

Payments to Mexico were \$2.6 billion in 1980, compared with \$0.8 billion in 1970; they increased at an average annual rate of 13 percent. Payments also increased rapidly in 1971-75, but at a

declining rate, as the Mexican inflation rate deterred U.S. travel there. After devaluation of the peso, growth increased at a rapid rate.

As in the Canadian border area, U.S. residents in the Mexican border area increased their purchases of gasoline at nearby Mexican locations during periods of shortages and relatively higher gasoline prices in the United States. Large increases in payments in the border area in 1973-75 and 1979-80 partly reflected these developments.

Payments for travel to the interior of Mexico accounted for 35-45 percent of total payments over the decade. Travel to these areas was stimulated in 1976-79 by Mexican Government promotion of international travel to Mexico, establishment of new air routes between Mexico and the United States, and opening of new resort areas on Mexico's Yucatan peninsula. A slight decline in payments in 1980 probably reflected the slowdown in the U.S. economy and an acceleration of Mexican inflation.

### Passenger fares

Passenger fares consist of the earnings of vessel and airline operators for the transportation of persons. Exports include receipts of U.S. operators for the transportation of foreign residents (a) between the United States and foreign countries and (b) between foreign countries. Imports include payments by U.S. residents to foreign operators for transportation to and from the United States.<sup>3</sup>

Passenger fare receipts of U.S. operators, which were derived almost entirely from airline operations, were \$2.6 billion in 1980, compared with \$0.5 billion in 1970; the average annual rate of

3. Receipts for the transportation of foreign residents within the United States, and payments to foreign carriers for transportation within foreign countries and regions are included in the travel accounts because they are defined as part of local services consumed by travelers.

Receipts and payments for transportation to and from Canada and Mexico are included, by convention, in the travel accounts, rather than the passenger fare accounts.

Because the international accounts measure transactions between U.S. and foreign residents, receipts of U.S. operators for the transportation of U.S. residents overseas, which are transactions between domestic residents, are not part of the passenger fare accounts.

increase was 17 percent. Over 80 percent of receipts was derived from passenger traffic to and from the United States in 1980, compared with 70 percent in 1970. The growth in receipts from air transportation of foreign passengers between foreign countries, the other type of receipts, was limited because of many countries' restrictions on local operations of foreign airlines.

The large average annual increases in the number of foreign visitors to the United States were the main impetus to the growth in receipts in most years. Arrivals of foreign visitors slowed only during the worldwide recession of 1974-75 and the slackening in economic activity in many foreign countries in 1980. Unusually large increases in average passenger fares in those years also contributed to the slowdown.

Passenger fare payments to foreign operators increased more slowly than receipts, mainly because of the slower rise in U.S. travelers abroad than in foreign visitors to the United States. Payments were \$3.6 billion in 1980, compared with \$1.2 billion in 1970, and increased at an average annual rate of 12 percent.

(Average annual percent change, 1970-80)

	Receipts	Payments
Total passenger fares	17	13
Average passenger fares	8	7
Number of travelers	13	5

Average passenger fares to and from the United States, for both U.S. and foreign travelers, were affected by steep fuel price increases; fuel price increases were largely responsible for fare increases of 25 percent in 1974 and 15 percent in 1980. Partly offsetting were several developments that held fare increases to less than 4 percent annually in other years. In the early 1970's, the introduction of jumbo jets reduced airline average operating costs by greatly increasing the capacity of passenger flights. In 1975-76, U.S. regulations affecting lower priced charter flights were liberalized. In 1978-80, following deregulation of scheduled-flight fares and increased competition between U.S. and

foreign airlines, discount and "no-frills" fares on transatlantic flights proliferated.

Although most passenger fare receipts and payments were for transatlantic travel, developments in travel patterns between the United States and other areas also had an impact on total receipts and payments. Receipts were boosted by an increasing number of visitors from Japan. Although average fares for transportation from the Far East were considerably higher than transatlantic fares, Japanese visitors accounted for 15 percent of total overseas visitors in 1980, compared with 9 percent in 1970. Payments were less affected because there was relatively little growth in U.S. travel to the Far East. The number of U.S. travelers to the Caribbean area and Central America increased at a slightly faster pace than the number of transatlantic travelers. Increases in travel to that region did not accelerate the rise in payments because average fares to the Caribbean and Central American region were lower than to any other overseas area, and most U.S.-Caribbean traffic was carried by U.S. airlines.

### Transportation

The transportation estimates primarily consist of international transactions of vessel and airline operators.

Exports include receipts of U.S. vessel and airline operators for the transportation of U.S. export freight from the U.S. port of export to foreign destinations, and for the transportation of foreign freight between foreign ports.<sup>4</sup> Exports also include the aggregate value of services and goods provided by U.S. residents to foreign vessel and airline operators in connection with their transportation operations in the United States. The value of these services and goods, referred to as port services, includes a wide range of items such as fuel, berthing, port fees, office and warehouse rentals, wages and salaries of U.S. personnel, advertising, and business services. Freight car rental receipts from Canada and Mexico and vessel charter hire receipts are the items in other transportation exports.

4. The cost of transporting freight usually is borne by the importer, regardless of whether transportation costs are included in the sale price of exports. When transportation costs are included in the sale price, the seller (exporter) merely transmits funds for transportation services from the buyer (importer) to the carrier (vessel or airline operator). Thus, earnings of foreign vessel and airline operators for the transportation of U.S. export freight are not included in the transportation estimates because those earnings are transactions between foreign residents—foreign operators and foreign importers—and have no direct impact on the U.S. international accounts. Similarly, earnings of U.S. operators for the transportation of U.S. import freight are not included in the transportation estimates because those earnings represent transactions between U.S. residents—U.S. operators and U.S. importers—and are not international transactions.

Imports include payments by U.S. residents to foreign vessel and airline operators for the transportation of U.S. import freight from foreign ports to U.S. destinations.<sup>5</sup> Imports also include payments by U.S. vessel and airline operators to foreign residents for port services purchased abroad in connection with U.S. operators' international transportation operations. Vessel charter hire payments and freight car rental payments to Canada and Mexico are the remaining import transactions.

In 1970-80, foreign vessel and airline operators transported a larger share of U.S. export and import freight than did U.S. operators. Partly as a result, the relative importance of freight receipts in total transportation exports was much less than the corresponding item in transportation imports and the relative importance of port services in exports was much larger than the corresponding item in imports.

**Freight receipts.**—Freight receipts of U.S. ocean vessel operators were \$2.7 billion in 1980, compared with \$0.8 billion in 1970 (table 5). Growth reflected increases in ocean freight rates; the volume of export freight carried by U.S. vessel operators was unchanged.

The increases in ocean freight rates largely reflected higher fuel and operating costs of U.S. vessel operators, who

5. See footnote 4.

Table 5.—U.S. International Transportation Transactions, by Major Type

[Millions of dollars]

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Exports</b>	<b>3,125</b>	<b>3,299</b>	<b>3,579</b>	<b>4,455</b>	<b>5,697</b>	<b>5,549</b>	<b>6,747</b>	<b>7,264</b>	<b>8,335</b>	<b>8,919</b>	<b>11,494</b>
Freight receipts	1,166	1,072	1,169	1,461	2,000	2,066	2,352	2,307	2,611	2,078	3,708
Ocean	813	750	781	1,038	1,477	1,511	1,720	1,642	1,844	2,202	2,859
Air	187	202	235	376	390	298	330	427	507	577	742
Other <sup>1</sup>	166	120	137	149	133	197	219	238	260	299	305
Port services	1,854	2,128	2,395	2,991	3,570	3,534	4,391	4,957	5,608	5,882	7,493
Ocean	1,405	1,491	1,585	2,038	2,488	2,451	3,067	3,413	3,993	4,554	4,959
Air	512	630	789	790	1,027	1,086	1,318	1,546	1,632	1,848	2,435
Other <sup>2</sup>	26	43	41	58	55	97	66	98	88	77	73
Other	65	74	75	102	137	118	61	90	101	149	239
<b>Imports</b>	<b>2,843</b>	<b>3,118</b>	<b>3,599</b>	<b>4,694</b>	<b>5,942</b>	<b>5,695</b>	<b>6,352</b>	<b>7,474</b>	<b>8,911</b>	<b>10,415</b>	<b>10,294</b>
Freight payments	1,601	1,862	2,180	3,042	3,683	3,370	4,373	5,599	5,647	5,805	6,188
Ocean	1,444	1,657	1,951	2,778	3,360	3,047	3,802	4,822	5,235	5,099	5,512
Air	115	188	185	162	210	246	301	203	420	455	471
Other <sup>1</sup>	42	47	44	79	60	77	110	114	102	111	110
Port services	843	906	980	1,229	1,813	1,918	2,086	2,367	2,692	3,289	4,236
Ocean	315	294	329	408	730	756	671	643	1,041	1,203	1,287
Air	466	580	622	723	1,028	1,115	1,363	1,257	1,808	2,010	2,604
Other <sup>2</sup>	29	35	32	37	49	48	56	67	72	70	67
Other	400	259	241	424	476	410	291	420	442	521	558

1. Consists primarily of pipeline freight receipts from Canada and receipts from Canada related to Great Lakes traffic and rail traffic.

2. Consists of transactions related to Great Lakes traffic and rail traffic between Canada and the United States.



were mostly liner operators providing advertised, regularly scheduled service at published rates on specified international shipping routes. Although the volume of U.S. export freight carried by U.S. vessel operators was unchanged, U.S. export freight volume carried by foreign operators increased at an average annual rate of 7.5 percent. Consequently, U.S. operators' share of the total export volume declined from 7 percent in 1970 to 4.5 percent in 1980.\*

U.S. operators' earnings for transporting U.S. grain exports to Eastern Europe boosted U.S. freight receipts in 1973-79. These earnings were partly the result of U.S.-U.S.S.R. shipping agreements, which reserved specific amounts of U.S. grain exports for transportation by U.S. operators at specified rates. Grain exports to the U.S.S.R. were embargoed in 1980.

Freight receipts of U.S. airline operators were \$0.7 billion in 1980, compared with \$0.2 billion in 1970. Although the volume of U.S. exports transported by air was still less than 1 percent of total exports in 1980, the average annual increase in airline cargo volume was about 18 percent. Freight earnings of U.S. airlines accounted for 20 percent of all U.S. freight receipts in 1980, compared with 17 percent in 1970.

**Freight payments.**—Freight payments, which consisted almost entirely of ocean freight payments, were \$6.1 billion in 1980, compared with \$1.6 billion in 1970. Growth largely reflected expansion in the U.S. economy and the resulting increase in U.S. demand for merchandise imports. Payments growth and freight volume declined in two periods—the U.S. recessions of 1974-75 and 1980. The payments decline in 1974-75 was moderated by a rise in the volume of petroleum imports. Petroleum imports increased, despite reduced domestic demand for petroleum products, as stocks were built up following

(Average annual percent change)

	U.S. real GNP	Import freight	
		Volume	Payments
1971-73	4.8	13.8	24.7
1974-75	-0.9	-1.5	5.8
1976-79	4.7	9.5	18.8
1980	-2.2	-17.5	-8.7

the embargo imposed in late 1973 and early 1974 by some Middle East countries on petroleum shipments to the United States. In contrast, the payments decline in 1980 was accentuated by a decline in the volume of petroleum imports, which reflected not only the slowdown in the U.S. economy, but also U.S. conservation efforts.

Freight payments for U.S. merchandise imports were also affected by fluctuations in ocean freight rates. Average freight rates on nonpetroleum imports increased at an average annual rate of 15 percent in 1970-80, reflecting sharp increases in fuel prices and operating costs in 1974, 1979, and 1980. Average rates on petroleum imports—tanker rates—were stable from 1970 to 1973, and subsequently fluctuated sharply in response to petroleum prices, the tanker capacity situation, and economic activity. Rates rose in mid-1974 following the end of the Middle East embargo and an increase in fuel costs, then declined in 1975 when economic activity slowed in most developed countries. Large increases in 1979 and 1980, due to higher fuel costs, pushed rates to 3 times their 1970 level.

Air freight payments were \$0.5 billion in 1980, compared with \$0.1 billion in 1970. They accounted for only 8 percent of total freight payments in 1980, about the same as 1970.

**Port services receipts.**—U.S. receipts for port services provided to foreign vessel and airline operators in the United States were \$7.5 billion in 1980, compared with \$2.0 billion in 1970. Growth slowed only during the U.S. recession 1974-75 and the concurrent economic slowdown in other developed countries.

Port services provided to vessel operators were \$5.0 billion in 1980, compared with \$1.4 billion in 1970; the average annual rate of increase was

13 percent. The volume of U.S. trade transported by foreign vessel operators increased 5.5 percent annually, and prices of U.S. services and goods increased 8 percent.

Port services provided to foreign airline operators were \$2.4 billion in 1980, compared with \$0.5 billion; they increased at an average annual rate of 17 percent. The faster growth of these port services than of port services provided to vessel operators reflected the relative importance of passenger traffic, compared with cargo traffic, for most airline operators. The volume of U.S. international passenger traffic carried by foreign airlines increased 7.5 percent annually, compared with a 5.5-percent increase in trade volume.

**Port services payments.**—Payments by U.S. vessel and airline operators for port services abroad were \$4.2 billion in 1980, compared with \$0.8 billion in 1970. The faster growth in payments than receipts reflected higher petroleum prices abroad than in the United States. U.S. petroleum prices were regulated for most of the decade, and increases were neither as rapid nor as large as foreign increases until U.S. deregulation occurred at the end of the decade.

Payments by U.S. vessel operators increased 16 percent annually; this increase reflected price increases in foreign services and goods and, to a lesser extent, an increase in the volume of import freight carried by U.S. operators.

Payments by U.S. airline operators increased 19 percent annually, reflecting increases in international passenger traffic—particularly in foreign visitors to the United States—and in foreign prices. Their payments were 66 percent of total port expenditure payments in 1980, compared with 59 percent in 1970.

**Other transportation transactions.**—Among other transportation receipts, rental receipts of U.S. railroad companies for freight cars temporarily in use in Canada and Mexico were the largest item in 1975-80. A large increase in these receipts from Mexico in 1980 reflected a surge in Mexico's imports. In 1970-74, most receipts were due to tanker charters by the foreign trans-

\* Estimates of receipts of U.S. vessel operators and the volume of export freight transported by U.S. operators may be underestimated because some U.S. operators may charter foreign flag ships and use them, in addition to U.S. flag ships, in U.S. foreign trade. Because it is not possible to identify all of this U.S. export freight, receipts may be underestimated. For the same reasons, charter hire payments to foreign shipowners may be underestimated.

portation affiliate of a U.S. petroleum company. Those charters were discontinued in 1975.

Among other payments, charter hire payments to foreign shipowners accounted for over 80 percent of other payments.<sup>7</sup> Freight car rental payments to Canada and Mexico accounted for the remainder.

## Royalties and Fees and Private Miscellaneous Services

### Royalties and fees

Royalties and fees consist of receipts and payments of royalties and licensing fees for the use of intangible property rights—copyrights, trademarks, patents, techniques, processes, formulas, designs, franchises, manufacturing rights, etc.—and other fees. Other fees consist of net charges between parent companies and their affiliates for services rendered, research and development expenditures, assessments, rentals for the use of tangible property, and other expenses allocated by the home office.

**Royalties and licensing fees.**—Contracts for the use of intangible property rights provide an important means for transferring technology. Licensing and other agreements with foreign companies that have extensive production facilities and marketing networks are utilized by some U.S. companies to sell their technology in foreign markets. Other companies prefer to establish foreign affiliates or to acquire equity interests in foreign companies as a means of acquiring access to foreign markets for their technology.<sup>8</sup> Companies that have equity interests in foreign affiliates receive not only royalties and fees for the use of rights, but also a share of affiliates' profits. The profits are recorded in the direct investment income accounts.

Total net receipts of royalties and licensing fees were \$4.7 billion in 1980, compared with \$1.3 billion in 1970; the

average annual rate of increase was 14 percent (table 6). Affiliated receipts in 1980 were \$3.6 billion, compared with unaffiliated receipts of \$1.1 billion. Affiliated receipts increased at more than double the rate of unaffiliated receipts—17 percent compared with 8 percent—partly because of large U.S. direct investments in leading industries in developed countries.

The industry distribution of affiliated and unaffiliated royalties and licensing fees receipts was virtually constant over the decade; most receipts originated in manufacturing industries. Machinery accounted for 44 percent of affiliated, and 40 percent of unaffiliated receipts. In the machinery industry, affiliated

(Percent, average 1970-80)

	Affiliated	Unaffiliated
Manufacturing.....	53	40
Machinery.....	44	40
Chemicals.....	18	16
Transportation equipment.....	2	3
Other.....	19	33
Other.....	17	11

receipts partly reflected U.S. technological developments in computers and advanced electronics and unaffiliated receipts were largely related to production of consumer goods, particularly electronic components and electrical equipment and appliances. In the chemical industry, both affiliated and unaffiliated receipts reflected U.S. technological advances in agricultural and industrial chemicals, pharmaceuticals, and, to a lesser extent, plastics and other synthetic materials. In the transportation equipment industry, receipts were largely related to the manufacture of motor vehicles.

By area, the majority of receipts were from developed countries, where resources were available to adopt and use U.S. technology and there were large markets for the resulting output. Affiliated receipts, which were concentrated in Western Europe, reflected large U.S. direct investments there. In 1980, about 70 percent of affiliated receipts were from Western Europe, 10 percent from Canada, and 8 percent from Japan. The share of receipts from developing coun-

tries was 8 percent in 1980 and declined each year of the decade.

Unaffiliated receipts were more widespread. In 1980, about 40 percent of receipts were from Western Europe, 30 percent from Japan, and 12 percent from other developed countries. In contrast to affiliated receipts, the share of unaffiliated receipts from developing countries increased each year to 18 percent in 1980.

Payments of royalties and licensing fees, like receipts, were concentrated in manufacturing industries in developed countries, mainly Western Europe, Canada, and Japan. For both affiliated and unaffiliated transactions, the largest payments were in the chemical industry—pharmaceuticals, agricultural, and industrial. Other large affiliated payments were in the food and primary and fabricated metals industries. Unaffiliated payments were largely in the machinery and automotive industries.<sup>9</sup>

**Other fees.**—These charges consist largely of fees for management, professional, and administrative services; consulting and technical advice; and research and development. Rentals for tangible property, including films, are also included.

Receipts of other fees were \$2.1 billion in 1980, compared with \$1.0 billion in 1970; the average annual rate of increase—8 percent—was less than that in royalties and licensing fees. Receipts were almost entirely from affiliated companies, mainly machinery and chemical affiliates in Western Europe and automotive affiliates in Canada. Receipts from petroleum, trading, banking, finance, and insurance affiliates were also significant.

Payments of other fees—entirely to foreign parents of U.S. affiliates—were largely related to research and development expenses allocated to U.S. affiliates by parent companies in Germany, the Netherlands, and the United Kingdom. Offsetting flows (receipts of U.S. affiliates from their parents) in the automotive industry were significant. These were related to warranty work and training provided by U.S. affiliates to Japanese parents.

7. See footnote 6.

8. For details, see Meryl L. Kropor, "U.S. International Transactions in Royalties and Fees, 1967-78," *SURVEY* (January 1980): 20-35.

9. See footnote 8.

**Private miscellaneous services**

Private miscellaneous services include, among exports, contractors' receipts for technical services; reinsurance; communications; and services and goods provided to foreign government agencies and international organizations located in the United States. Among imports, the major transactions are reinsurance; communications; and wages paid to temporary resident aliens (table 7).

Exports of miscellaneous services were \$5.2 billion in 1980, compared with \$1.3 billion in 1970; the average annual rate of increase was 15 percent. Imports were \$3.2 billion, compared with \$0.8 billion; they increased at a rate of 15 percent. Increases in receipts from con-

tractors' services and communication services led the growth in exports. Increases in payments for reinsurance and communication services led the growth in imports.

*Receipts from contract operations of U.S. construction, engineering, and other technical services firms.*—U.S. net receipts for construction and technical services provided to foreign residents were \$1.6 billion in 1980, compared with \$0.3 billion in 1970; the average annual rate of increase was 23 percent. These receipts are net of outlays abroad for wages, materials, and other expenses. They are also net of related U.S. merchandise exports, which are included in the merchandise trade account.

Most contract receipts included engineering and design services, reflecting

the availability of advanced technology in the United States (table 8). Projects related solely to general engineering and design services accounted for 41 percent of total receipts in 1978-80. Projects consisting of engineering, design, and related construction accounted for another 30 percent of the total. Receipts from projects involving only general construction services were relatively small, probably because of the greater competitiveness of other countries for this type of project.

By area, most receipts—almost 80 percent of the total in 1978-80—were from developing countries. Much of the growth was accounted for by OPEC countries, particularly Saudi Arabia and, until 1979, Iran. OPEC members accounted for almost 50 percent of re-

**Table 6.—U.S. International Transactions in Royalties and Fees**  
(Millions of dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Receipts of royalties and fees</b>	<b>2,331</b>	<b>2,845</b>	<b>3,179</b>	<b>3,225</b>	<b>3,321</b>	<b>4,300</b>	<b>4,353</b>	<b>4,686</b>	<b>6,768</b>	<b>5,945</b>	<b>6,955</b>
Affiliated	1,758	1,927	2,115	2,013	2,070	2,543	2,534	2,833	4,705	4,060	5,085
Royalties and licensing fees	761	874	1,003	1,370	1,049	1,356	1,356	2,173	2,827	3,000	3,000
Other	1,007	1,063	1,060	1,137	1,421	1,087	1,178	1,710	2,008	1,078	2,085
Unaffiliated	573	918	653	712	751	757	822	623	1,036	1,065	1,170
Royalties and licensing fees	570	914	651	707	745	750	815	612	1,045	1,052	1,159
Other	3	4	4	5	6	7	7	11	19	13	21
<b>Payments of royalties and fees</b>	<b>225</b>	<b>241</b>	<b>324</b>	<b>326</b>	<b>345</b>	<b>473</b>	<b>482</b>	<b>439</b>	<b>697</b>	<b>757</b>	<b>759</b>
Affiliated	111	116	155	209	190	287	303	243	303	333	515
Unaffiliated	114	125	150	176	195	186	180	106	214	284	254

**Table 7.—U.S. International Transactions in Private Miscellaneous Services**  
(Millions of dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Exports</b>	<b>1,294</b>	<b>1,846</b>	<b>1,764</b>	<b>1,925</b>	<b>2,321</b>	<b>2,920</b>	<b>3,584</b>	<b>3,686</b>	<b>4,130</b>	<b>4,187</b>	<b>5,297</b>
Contractors' fees	258	347	363	394	520	855	1,334	1,241	1,262	1,004	1,563
Reinsurance <sup>1</sup>	77	102	138	155	100	204	103	183	222	207	251
Communications	304	314	343	498	557	648	777	805	978	1,109	1,357
Expenditures of foreign governments and international organizations	464	561	651	705	780	881	1,004	1,102	1,222	1,286	1,625
Trade union receipts from Canadian affiliates	54	40	63	58	62	84	74	73	74	73	70
Wages of U.S. residents abroad <sup>2</sup>	11	21	12	18	33	34	42	40	30	44	42
Expenditures of foreign residents employed in the United States	63	60	83	85	103	131	142	160	174	178	190
Film rentals <sup>3</sup>	43	63	73	77	100	100	128	142	102	189	210
<b>Imports</b>	<b>827</b>	<b>956</b>	<b>1,443</b>	<b>1,180</b>	<b>1,262</b>	<b>1,451</b>	<b>2,004</b>	<b>2,198</b>	<b>2,466</b>	<b>2,526</b>	<b>3,222</b>
Reinsurance <sup>1</sup>	160	210	215	202	173	202	460	567	754	813	580
Communications	281	336	376	494	555	617	827	834	1,063	1,286	1,476
Trade union payments to Canadian affiliates	28	33	20	34	44	40	42	37	43	44	50
Wages of temporary resident aliens <sup>2</sup>	197	221	236	275	315	370	400	442	476	473	620
Expenditures of U.S. residents employed abroad	44	45	47	48	49	52	40	40	44	54	54
Film rentals and fees for television broadcasting rights <sup>3</sup>	12	12	12	23	23	35	85	60	90	63	126
Other <sup>4</sup>	95	96	102	104	164	164	104	106	104	106	105
<b>Addendum: Film rentals<sup>4</sup></b>											
Receipts	240	236	281	281	325	392	387	442	611	510	498
Payments	12	13	12	20	27	21	65	37	78	61	86

1. Exports include premiums received less losses paid; imports include premiums paid less losses recovered. See table 9 for details.

2. Exports include gross receipts of wages of U.S. residents who commute to jobs in Canada and small amounts of earnings of U.S. residents temporarily employed in the United Kingdom. Receipts do not include wages and salaries of U.S. employees temporarily assigned to foreign affiliates of U.S. parents. These are included in receipts of royalties and fees from affiliated foreign residents and are not separately identified. Imports include payments of wages and salaries to Canadian and Mexican residents who commute to jobs in the United States and earnings of temporary resident aliens.

3. Includes receipts from and payments to unaffiliated foreign residents only. Film rental transactions with affiliated foreign residents are included in royalties and fees. See addendum for combined affiliated and unaffiliated receipts and payments.

4. Includes recovery of a large portion of fees paid in earlier years for rights to televise the Olympic games from the Soviet Union in 1980.

5. Includes estimates of consumer fees paid by U.S. residents for visas, licenses, permits, etc., partial estimates of direct insurance transactions with foreign insurance companies, and film companies' outlays abroad for film productions.

6. Includes combined affiliated and unaffiliated receipts and payments.

ceipts in 1978-80, compared with 25 percent in 1970. Receipts from Mexico also increased rapidly in 1978-80, largely reflecting the increase in economic development projects following petroleum discoveries in the mid-1970's.

Many of the services provided to developing countries were related to development of natural resources and construction of transportation, communi-

cation, housing, and power-generating infrastructures. Natural resources projects were largely for crude petroleum production, pipeline construction, and petroleum refineries. U.S. companies also had significant receipts from the design and construction of facilities for crude ore production and metal refining. Engineering, design, and construction of roads, port facilities, and

railways were related to the development of infrastructures, as were dam design and construction and engineering services for power-generating plants.

**Reinsurance.**—Reinsurance transactions include transactions related to the transfer of risk insurance between U.S. and foreign insurance companies. Exports of reinsurance services measure net receipts of U.S. insurance companies on risks assumed from foreign insurance companies, that is, reinsurance premiums received from foreign insurers less losses paid. Imports measure net payments of U.S. insurance companies on risks transferred to foreign insurance companies, that is, reinsurance premiums paid to foreign insurers less losses recovered.

These transactions are not a measure of the profitability of international reinsurance transactions of U.S. companies, nor an indication of their international competitive position, because risks transferred to, and assumed from, foreign insurers are usually only a part of the total risks insured by U.S. companies.

Estimates of reinsurance transactions indicate that risks assumed from foreign insurers were far less than risks transferred by U.S. insurers in 1970-80. Net receipts remained virtually unchanged at \$0.1 billion in 1970 and \$0.3 billion in 1980, but net payments increased from \$0.2 billion in 1970 to \$1.0 billion in 1980. Before losses were netted out, premiums received increased from \$0.3 billion to \$0.9 billion, and premiums paid increased from \$0.4 billion to \$2.1 billion (table 9).

The rapid growth in payments, on both a net and gross basis, was partly related to the increasing number of risks transferred by U.S. insurance companies to their foreign affiliates, particularly those located in the Caribbean area, where the tax treatment and regulation of insurance companies was more favorable than in the United States. By transferring more profitable risks abroad and poorer risks to the United States, insurance companies took advantage of lower tax rates abroad. For example, gross premiums paid to insurance companies located in

Table 8.—Net Receipts from Contract Operations of U.S. Construction, Engineering, and Other Technical Services Firms

(Millions of dollars)

	1970	1978	1979	1980
Total.....	258	1,232	1,804	1,963
By type of service:				
Engineering and design <sup>1</sup> .....	102	906	718	1,105
General engineering.....	102	545	334	347
General design.....	26	37	10	51
Engineering and design.....	17	47	26	78
Engineering, design, and related construction <sup>2</sup> .....	48	276	269	621
General construction <sup>3</sup> .....	27	120	103	113
Technical assistance <sup>4</sup> .....	74	157	107	225
Consulting <sup>5</sup> .....	14	62	49	81
Other <sup>6</sup> .....	2	18	27	30
By area:				
Western Europe.....	58	98	142	103
Eastern Europe.....	1	6	21	12
Canada.....	17	39	24	75
Japan.....	10	28	47	45
Australia, New Zealand, and South Africa.....	5	39	18	54
Latin America.....	57	157	192	493
Other areas.....	110	906	500	728
Memorandum:				
OPEC.....	64	707	406	854

1. Includes services of a professional nature in the fields of engineering, architecture, and land surveying.
2. Includes building construction—office buildings, farm buildings, hotels, dwellings, and stores—and heavy construction—bridges, highways and tunnels, port facilities, dams and water projects, airfields, pipelines, and industrial facilities.
3. Includes training and supervision of personnel; management of hotels, plants, and other facilities; data processing; design and installation of computer and information systems; procurement; and installation, maintenance, and repair of equipment.
4. Includes economic and management consulting, research, feasibility studies (except physical studies), logistics planning, and other studies.
5. Includes diverse services such as dredging, certain types of drilling services, and underwater (diving) services.

NOTE.—Receipts are net of outlays abroad for wages, materials, and other expenses, and exclude U.S. merchandise exports that are included in the merchandise trade account. Receipts do not include contract receipts of U.S. payments for services provided to foreign affiliates and receipts from contracts written under the Foreign Military Sales program. The former are part of "other services" in the affiliated royalties and fees account, and the latter are included in the Government transactions account.

Table 9.—U.S. International Reinsurance Transactions

	Premiums (Millions of dollars)		Losses (Millions of dollars)		Loss ratios (Percent)	
	Receipts	Payments	Paid	Recovered	Paid <sup>1</sup>	Recovered <sup>2</sup>
1970.....	251	448	174	269	68	54
1971.....	310	474	208	294	67	58
1972.....	402	513	244	255	61	58
1973.....	476	575	321	373	67	65
1974.....	599	879	394	596	70	75
1975.....	623	900	470	698	70	68
1976.....	726	1,118	553	819	73	65
1977.....	784	1,272	601	875	77	62
1978.....	885	1,567	681	818	72	68
1979.....	912	1,787	805	974	75	65
1980.....	922	2,162	871	1,138	73	54

1. Losses paid as a percentage of premiums received.

2. Losses recovered as a percentage of premiums paid.

NOTE.—Premiums are net of cancellations and commissions charged to or by foreign insurance companies.



the Caribbean area, mainly Bermuda, increased from less than \$25 million in 1970 to over \$800 million in 1980, and the loss ratio (losses as a percentage of premiums) on risks transferred to Bermuda was 89 percent, compared with a loss ratio of 54 percent for total risks transferred abroad and 73 percent for total risks assumed from abroad.

**Communications.**—Communications estimates measure settlement transactions between U.S. and foreign communications companies. They do not represent the value of transmissions from points of origin to points of destination. An international cable or satellite transmission that originates in the United States is sent by a U.S. carrier to a foreign carrier, which delivers the transmission to its foreign destination. The U.S. carrier receives payment for the entire transmission from the U.S. customer, and then remits part of the payment to the foreign carrier. Only the payment to the foreign carrier for its services is included in transactions between U.S. and foreign communications companies and thus in the international transactions accounts. Similarly, receipts of U.S. carriers for carrying transmissions received from foreign carriers to U.S. destinations are included. The estimates also include receipts and payments between the International Satellite Communication Organization (Intelsat) and foreign communications companies for the leasing of satellite circuits owned by Intelsat (receipts) and the distribution of a share of net earnings to the foreign owners of Intelsat (payments).

Communications receipts rose to \$1.3 billion and payments to \$1.5 billion in 1980 from \$0.3 billion each in 1970. Annual payments frequently exceeded receipts by a small amount possibly because more communications between U.S. and foreign residents originated in the United States than abroad.

Rapid growth in both receipts and payments—and average annual growth rates of 17 and 18 percent, respectively, in 1970-80—followed the introduction of commercial communications by satellite in the mid-1960's. The additional capacity not only permitted an increase in traditional communications, but also

[Average annual percent change]			
	Receipts	Payments	Receipts and payments
1950-59	6	8	7
1960-69	8	11	10
1970-80	23	22	23
1970-80	17	18	18

encouraged the development of new types, such as the relaying of television signals. Expanded development for marine and aviation communication, transmission of weather information, and rapid transmission of scientific, business, and other types of information also contributed to the strong growth in receipts and payments.

**Expenditures of foreign governments and international organizations.**—These transactions include expenditures in the United States by (a) foreign governments to establish, maintain, and staff embassies and consulates and (b) international organizations, such as the United Nations and the International Monetary Fund, for wages and salaries, construction, and administrative and other services. Also included are earnings of U.S. agents of foreign governments, such as lawyers, public relations personnel, and lobbyists.

Receipts were \$1.5 billion in 1980, compared with \$0.5 billion in 1970; they were about evenly divided between foreign governments and international organizations. Much of the increase reflected a rise in foreign diplomatic, consular, and related personnel to support expanded representational activities in the United States. The remainder reflected enlarged programs of international organizations and, in 1978-80, large construction expenditures by the United Nations for expansion of its New York headquarters and by the International Monetary Fund for new offices in Washington, D.C. After allowance for U.S. inflation, expenditures of foreign governments and international organizations increased about 4 percent annually. Receipts of foreign agents remained at about \$0.1 billion over the decade.

**Wages of nonresident aliens.**—These transactions include wages and salaries of Mexican and Canadian border resi-

dents who commute to jobs in the United States, and workers from the Caribbean area who are temporarily and seasonally employed here. These wages do not include the earnings of aliens residing illegally in the United States because, for purposes of measuring international transactions, they are *de facto* U.S. residents.

Wages of nonresident aliens almost tripled over the decade, reaching \$0.5 billion in 1980. Wages of workers from the Mexican and Caribbean areas increased at an average annual rate of 12 percent; this increase reflected both higher wage rates and increases in the number of workers. Wages of Canadian workers increased at a rate of 5 percent, less than the estimated increase in gross weekly earnings in U.S. private nonagricultural establishments.

Nonresident aliens were employed in most industries. About 40 percent of Mexican workers were employed in agriculture, 40 percent in service occupations, including household services, 15 percent in manufacturing, and 5 percent in construction. They accounted for 78 percent of wages paid to nonresident aliens in 1980, compared with 70 percent in 1970. Most were employed in California and Texas.

Canadian workers were employed primarily in manufacturing and in sales and services, mainly in the industrial areas of Michigan. Their wages were 15 percent of the total in 1980, compared with 25 percent in 1970.

Workers from the Caribbean area were concentrated in agricultural and household services occupations. Their share of the total wages increased to 8 percent in 1980 from 5 percent in 1970.

### Investment Income

U.S. receipts (exports) of investment income consist of income derived from U.S. residents' ownership of foreign assets; U.S. payments (imports) consist of income derived by foreign residents from their ownership of U.S. assets. Investment income—both receipts and payments—is classified as income related to direct investments, other private income, and U.S. Government income.

Receipts increased at an average annual rate of 22 percent during the 1970's, reaching \$75.9 billion in 1980. Payments increased at a rate of 24 percent, reaching \$43.2 billion. Net receipts increased from \$3.2 billion to \$32.8 billion. Among receipts, direct investment income and other private investment income accounted for most of the total. Other private investment income and U.S. Government income accounted for most of income payments.

#### Direct investment income

Direct investment income receipts are derived from U.S. ownership of foreign affiliates—ownership of 10 percent or more of the voting securities of an incorporated foreign business or an equivalent interest in an unincorporated foreign business enterprise; payments are derived from foreign ownership of U.S. affiliates. Such income, which is net of withholding and income taxes, is in the form of dividends, interest, earnings of unincorporated affiliates, and reinvested earnings—the direct investors' shares in the undistributed earnings of incorporated affiliates.

**Receipts.**—Direct investment income receipts were \$36.8 billion in 1980, compared with \$8.2 billion in 1970; the average annual rate of increase was 18 percent (table 10). Economic develop-

ments abroad, sharp petroleum price increases, and direct investment outflows during the decade and earlier years were the major factors contributing to growth.

In 1970-74, a strong expansion of leading foreign economies contributed to a 25-percent average annual increase in income from foreign affiliates. The particularly large increase of 51 percent in 1973 reflected, in addition, the dollar devaluation of February 1973, which had the effect of raising the dollar value of reinvested earnings—especially for affiliates in Germany, France, Belgium, the Netherlands, and, to a lesser extent, Japan. Further, income from petroleum affiliates was boosted by inventory profits related to sharp increases in petroleum prices in 1973. Petroleum price increases accelerated in 1974, but the effect on income was partly offset by easing of demand late in that year as economic activity in the United States and other industrial countries slowed. After total income declined in 1975, largely as a result of worldwide recession, receipts increased at an average annual rate of 25 percent in 1976-79, reflecting renewed worldwide expansion, before declining by 4 percent in 1980. In 1977 and 1978, appreciation of some foreign currencies against the dollar again significantly raised income receipts. In

1979, receipts were boosted by the sharp increase in petroleum prices and changes in British tax laws on inventory profits. In 1980, receipts were depressed by an unusual nonrecurring loss included in reported income, sluggish economic activity abroad, and increased competition in overseas auto markets. Partly offsetting was an increase in income of metals trading affiliates as a result of large increases in some metal prices.

Changes in the rate and pattern of direct investment during the 1970's and earlier years also explained developments in income receipts in 1970-80. Receipts reflected the steady increase in direct investment each year since 1950 and a shift in direct investment toward Western Europe.

Several developments in Western Europe contributed to a larger increase in investments there than in Canada and Latin America in the post-World War II period: (a) economic reconstruction following the war, (b) restoration of currency convertibility, and (c) the integration of major economies into the European Communities.<sup>10</sup> Also, nationalization of assets of foreign affiliates in some Latin American and Middle East countries during the late 1960's

10. For details, see Ole G. Wichard, "Trends in the U.S. Direct Investment Position Abroad, 1950-79," *Survey* (February 1981): 30-36.

Table 10.—U.S. Direct Investment Income Receipts

(Millions of dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Total</b>	8,189	9,360	10,948	16,642	14,187	12,846	15,999	18,479	21,463	20,398	38,842
<b>By industry:</b>											
Petroleum	2,455	2,278	3,805	5,717	4,063	4,705	5,123	8,331	8,819	13,413	13,022
Manufacturing	2,133	3,493	4,748	6,578	5,584	5,908	7,223	5,645	8,990	13,054	11,253
Chemicals	617	654	888	1,347	1,550	1,305	1,408	1,205	1,831	3,028	2,048
Machinery	1,831	1,175	1,540	2,071	2,073	2,062	2,298	2,331	3,288	3,310	3,450
Transportation equipment	387	445	763	1,194	313	635	1,457	881	1,436	2,221	250
Other	1,096	1,318	1,652	2,025	2,419	2,097	2,060	2,337	3,232	4,028	4,607
Trade	789	884	1,077	1,428	1,821	1,678	1,685	2,041	2,937	3,907	4,010
Banking, finance, and insurance	642	906	1,038	1,444	1,922	2,432	2,767	4,030	4,928	5,424	5,470
Other	1,149	909	847	1,325	1,786	1,092	5,200	1,400	1,403	2,623	3,000
<b>By area:</b>											
Western Europe	2,401	2,732	2,577	5,751	5,713	4,989	6,108	7,211	10,388	17,115	16,078
France	237	269	423	385	383	457	484	302	816	1,072	1,828
Germany	689	568	828	1,416	1,079	930	1,845	1,491	2,888	2,698	1,853
Netherlands	180	177	165	413	753	540	664	1,038	1,171	1,034	1,707
Switzerland	333	308	467	779	1,028	853	874	1,021	1,383	1,085	1,351
United Kingdom	626	825	1,819	1,278	1,861	638	812	1,787	2,174	5,758	4,403
Other	436	481	853	1,280	1,286	1,046	1,260	1,492	2,157	3,880	3,788
Canada	1,518	1,371	2,174	2,844	2,394	2,412	3,837	3,233	3,510	5,517	4,722
Japan	228	370	334	514	393	833	417	808	1,390	826	870
Australia, New Zealand, and South Africa	430	462	518	943	819	875	1,048	826	1,105	1,482	1,404
Latin America	1,431	1,434	1,540	2,511	2,145	2,204	2,478	3,712	4,779	5,548	6,358
Other	2,170	2,411	2,785	3,070	5,502	3,883	4,060	4,052	4,448	5,843	5,410

Note.—Estimates for 1977 and later years incorporate the results of a 1977 benchmark survey of U.S. direct investment abroad, and thus, may not be strictly comparable with earlier years. See *U.S. Direct Investment Abroad, 1977*, U.S. Department of Commerce, Bureau of Economic Analysis, (Washington, D.C.: U.S. GPO, April 1981.)

and 1970's had a negative effect on investments there.

Receipts from Western Europe increased at a faster pace than receipts from any other area, and accounted for 44 percent of the total in 1980, compared with 29 percent in 1970. While a large part of the increase was from petroleum affiliates, increases from manufacturing affiliates—particularly those in the petrochemical, computer, machinery, and transportation industries—and other affiliates also contributed significantly. Receipts from development of North Sea crude oil production also increased substantially.

Receipts from other developed countries increased at an average annual rate of 15 percent; their share of total income declined from 27 percent to 23 percent. Receipts from Canada increased at a rate of 14 percent, and accounted for 16 percent of the total in 1980, compared with 19 percent in 1970. Receipts were mainly from investments in petroleum, mining, and automotive industries. Some Canadian affiliates were sold in 1978–80 as Canada pursued a policy of achieving increased control of its natural resources. Income from developed countries other than Canada increased at a rate of 16 percent, and their share of the total remained at 8 percent. Investments in these countries, which included Japan, remained relatively small. Although Japanese restrictions on inward direct investment were eased in the mid-1970's, U.S. direct investment there did not increase significantly, reflecting continued constraints on inward flows.

Receipts from developing countries increased at a rate of 15 percent—16

percent for Latin America and 15 percent for other developing countries. Developing countries' share of the total dropped from 44 percent to 33 percent. Investment in developing countries was marked by several nationalizations of assets during the late 1960's and 1970's. Partly offsetting was a step-up in the establishment of foreign branches of U.S. banks and financial affiliates of other U.S. companies.

**Payments.**—Direct investment income payments, which were about one-fourth as large as receipts in 1980, increased at an average annual rate of 30 percent. Payments were \$9.3 billion in 1980, compared with \$0.9 billion in 1970 (table 11). In 1970–77, annual increases in payments averaged about 21 percent. The large decline of 17 percent in 1974 was attributable to a sharp drop in the market value of securities held by U.S. insurance affiliates, as U.S. stock prices declined.<sup>11</sup> Payments by other affiliates—mostly in petroleum and manufacturing industries—generally paralleled economic developments in the United States. Payments increased in 1970–74 as the U.S. economy expanded. In addition, payments by petroleum affiliates reflected steep price rises in petroleum products in 1973–74. As economic growth turned down in 1974–75, payments by manufacturing affiliates declined and increases in petroleum affiliates' payments moderated.

Most of the increase in payments over the decade occurred in 1978–80; the rate of increase was approximately 50 percent in each of those years. Payments

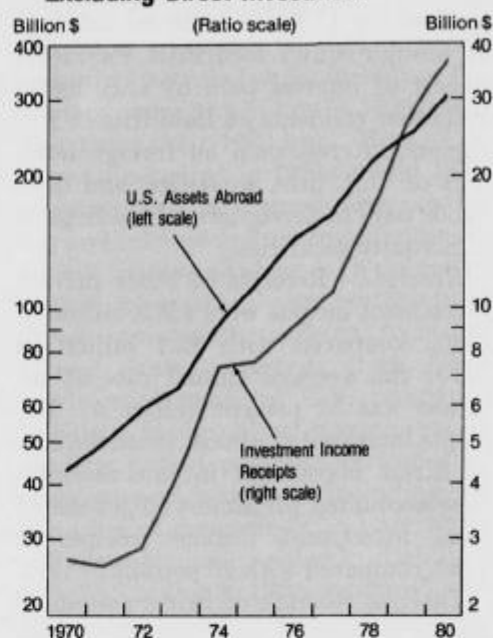
11. Under a change in definition, unrealized capital gains and losses were included in estimates of affiliates' earnings beginning in 1974.

Table 11.—U.S. Direct Investment Income Payments

[Millions of dollars]

	Total	Petroleum	Manufacturing	Trade	Insurance	Other industries
1970.....	875	204	418	117	81	55
1971.....	1,164	194	548	162	185	74
1972.....	1,284	224	605	117	215	124
1973.....	1,610	271	785	135	182	306
1974.....	1,331	579	875	118	-578	337
1975.....	2,234	714	743	186	343	248
1976.....	3,110	803	949	393	490	474
1977.....	2,834	836	900	655	96	347
1978.....	4,211	1,239	1,149	805	445	573
1979.....	6,357	2,087	1,699	1,066	599	956
1980.....	9,336	3,281	2,478	1,399	805	1,383

CHART 5  
U.S. Private Investment Income  
Receipts and U.S. Assets Abroad,  
Excluding Direct Investment



U.S. Department of Commerce, Bureau of Economic Analysis

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by petroleum affiliates, which accounted for a large part of the increase, reflected general price increases and the beginning of decontrol of U.S. crude oil prices in late 1979. Higher payments by manufacturing affiliates reflected the expansion in the U.S. economy in 1978–79. Lower payments by most manufacturing affiliates in 1980 reflected a sluggish U.S. economy. However, the decline was more than offset by a special transaction—the sale of a subsidiary of a foreign-owned affiliate. Payments by affiliates in other industries—trade, finance, insurance, real estate, and other services—also contributed to the 1978–80 increase.

Although the value of foreign direct investment in U.S. manufacturing affiliates far outweighed investment in any other U.S. industry, payments by petroleum affiliates were larger in several years—1978–80. Most investments were owned by companies in Western Europe—primarily in the Netherlands, United Kingdom, and Germany.

#### Other private investment income

Other private investment income receipts consist of interest received by



U.S. banks and other residents on loans, deposits, and other claims on foreigners; interest received on U.S. holdings of foreign debt securities; and dividends received by U.S. residents on holdings of foreign equity securities. Payments consist of interest paid by U.S. banks and other residents on liabilities to foreigners, interest paid on foreign holdings of U.S. debt securities, and dividends paid to foreigners on holdings of U.S. equity securities.

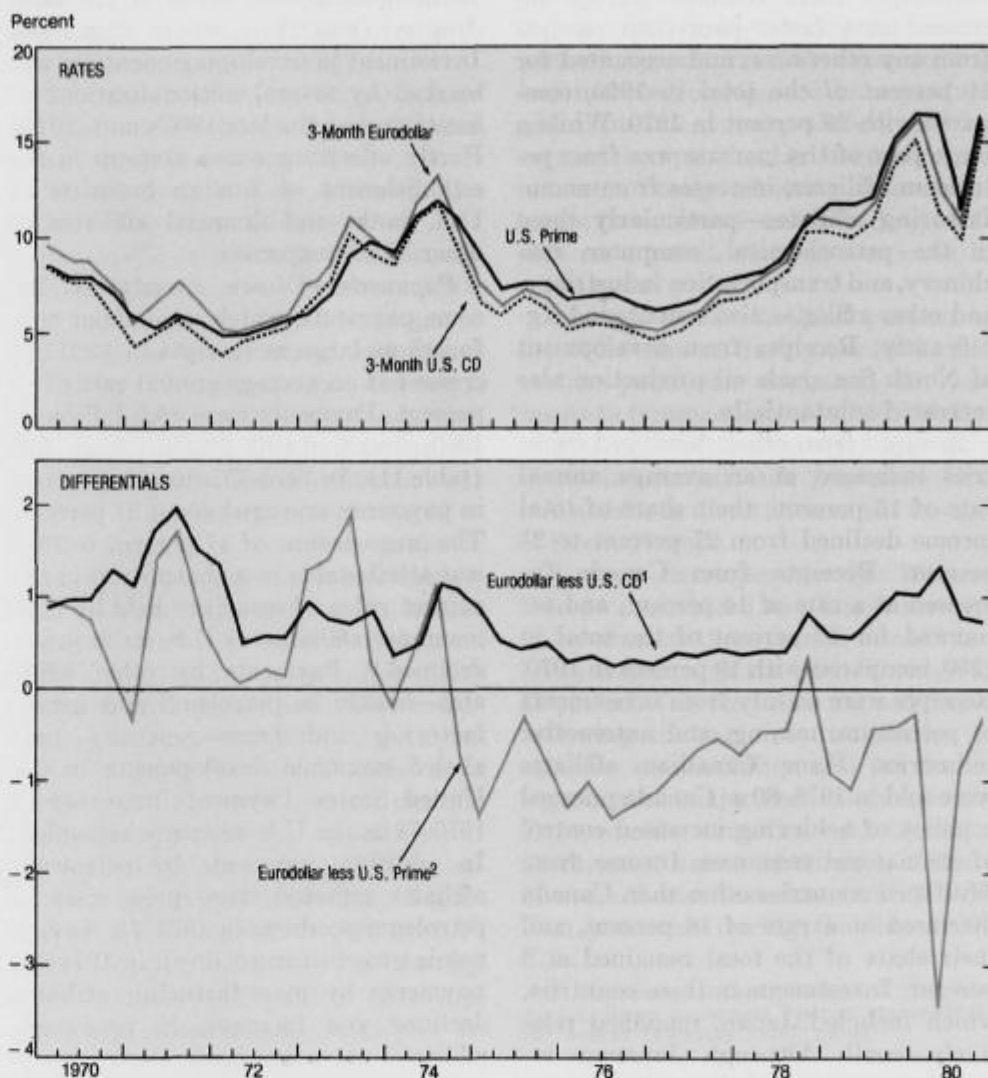
**Receipts.**—Receipts of other private investment income were \$36.5 billion in 1980, compared with \$2.7 billion in 1970; the average annual rate of increase was 32 percent (chart 5). Receipts increased at almost twice the rate of direct investment income receipts; they accounted for almost 50 percent of total investment income receipts in 1980, compared with 20 percent in 1970.

Interest receipts of banks accounted for 74 percent of other private investment income receipts in 1980, compared with 35 percent in 1970. Receipts were affected mostly by large increases in U.S. interest rates and bank lending in 1973-74 and 1978-80 and, at times, anticipated changes in the dollar exchange rate. In addition, U.S. banks' use of off-shore branches to channel funds abroad—particularly in Eurodollar markets—contributed significantly to receipts. During periods of domestic monetary restraint, offshore branches in the United Kingdom and the Caribbean area provided funds to U.S. banks for lending in Eurodollar and other markets.

Bank receipts were relatively stable in 1970-72, then doubled in 1973 and again in 1974. In 1973, U.S.-foreign interest rate differentials encouraged U.S. banks to lend abroad, and an anticipated decline in the dollar exchange rate (which actually occurred during the first 9 months) encouraged some foreign residents to borrow dollars in the expectation of repaying those loans later at a depreciated rate of exchange.

In 1974, receipts rose as interest rate differentials and weak U.S. credit demand continued to favor lending abroad (chart 6). Foreign loan demand remained relatively strong through the end of the year, partly to finance higher

## Selected Interest Rates and Differentials



1. Increases favor borrowing in the United States.  
 2. Increases favor lending abroad by U.S. banks.

Data: Federal Reserve Board

U.S. Department of Commerce, Bureau of Economic Analysis

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priced petroleum imports. Also, the Voluntary Credit Restraint Program, which had limited foreign lending, was terminated in early 1974. A near-doubling of receipts in 1976-78 reflected renewed worldwide economic expansion, a rise in interest rates, and in 1978 some borrowing related to exchange market speculation.

Although bank lending slowed decline 20 percent in 1979—partly due to the absence of borrowing related to exchange rates—income increased 80 percent as U.S. interest rates soared. Higher interest rates, together with a

large increase in Eurodollar lending, contributed to another large increase—50 percent—in receipts in 1980. Also, some foreign borrowers may have shifted to borrowing from U.S. banks as a temporary alternative to issuing long-term debt securities at record-high interest rates. Receipts were also boosted by purchases of high-yield foreign certificates of deposit by banks for U.S. clients, mainly money market mutual funds.

Other private investment income receipts consist also of dividends on foreign stocks and interest on foreign bonds and nonbank claims. Combined,



they accounted for about 26 percent of other income in 1980, compared with 65 percent in 1970; the average annual rate of increase was 18 percent.

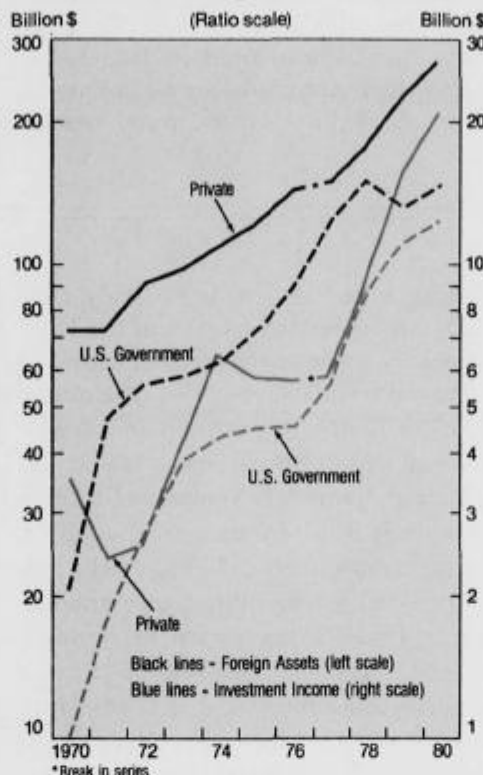
Dividends, which were almost \$0.4 billion in 1980, mostly from Canada and the United Kingdom, almost doubled over the decade.

Interest on long-term debt securities was \$4.3 billion in 1980, compared with \$0.9 billion in 1970. Receipts were mainly from Canadian bonds, which comprised 50-60 percent of U.S. holdings. Increases in receipts from holdings of bonds of other countries were limited until 1974, partly because the Interest Equalization Tax was imposed on income received from new security issues of all developed countries except Canada. After removal of this tax in 1974, purchases of bonds of—and receipts from—other countries increased at about the same pace as those in Canada.

Interest receipts on nonbank claims were \$4.8 billion in 1980, compared with \$0.6 billion in 1970. These receipts, which were related to the volume of commercial transactions, included interest on credit extended by U.S. companies to foreign customers and on U.S.-held foreign deposits.

**Payments.**—Payments of other private investment income were \$21.3 billion in 1980, compared with \$3.6 billion in 1970; they increased at an average annual rate of 25 percent (chart 7). Interest payments by U.S. banks were 61 percent of total payments in 1980 and were influenced by many of the same factors that affected receipts—expansion in foreign loan demand, surges in the levels of, and differentials between, U.S. and foreign interest rates, and the sharp increases in petroleum prices in 1973-74 and 1979-80. A significant part of the increases in 1973-74 and 1978-80 was accounted for by payments to foreign branches of U.S. banks. Because branches were subject to less stringent regulations and reserve requirements, they had more flexibility than U.S. parents in borrowing and lending abroad in periods of strong credit demand, and thus were utilized to finance loans in the United States and abroad.

### U.S. Investment Income Payments and Foreign Assets in the United States, Excluding Direct Investment



U.S. Department of Commerce, Bureau of Economic Analysis

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Several other factors also affected payments. Part of the decline in 1971 reflected a drop in deposits by private foreign residents who feared a devaluation of the dollar. (The payments were shifted to the U.S. Government, as foreign official agencies purchased U.S. Government securities with dollars acquired via exchange market intervention.) In 1973-74 part of the increase in payments reflected an increase in foreigners' deposits due to uncertainties created by the Arab-Israeli War. In 1978-80, the increase partly reflected the shift to large U.S. merchandise trade deficits.

Dividend payments were \$1.8 billion in 1980, three times their 1970 level. Foreign residents were net purchasers of U.S. stocks each year during the decade. The largest purchases were in 1975 and in 1980, and were mainly by the United Kingdom and some Middle East countries. Purchases by Switzerland were also significant in 1975. Large pur-

chases in 1980 partly reflected the rise in the U.S. stock market and, in the case of purchases by the United Kingdom, the removal of British exchange restrictions on foreign portfolio investments.

Interest payments on U.S. corporate and other private bonds, including Eurobonds, were \$1.3 billion in 1980, about four times their 1970 level. Most of the increase occurred in 1971-74 and 1977-80, when the U.S. economy was expanding and interest rates were rising in the United States and abroad. In the earlier period, when there were restraints on direct investment outflows from the United States, proceeds from Eurobonds were used by U.S. companies largely to finance direct investments. In the later period, proceeds were used for more general purposes, including the financing of domestic (U.S.) activities.

Payments on nonbank liabilities were \$2.1 billion in 1980, compared with \$0.4 billion in 1970; they included payments on credit extended by foreign companies to U.S. companies and on deposits in the United States.

### Government investment income

**Receipts.**—Government investment income receipts were \$2.6 billion in 1980, compared with \$0.9 billion in 1970; the average annual rate of increase was 11 percent. Receipts largely consisted of interest received on U.S. Government loans to developing countries under foreign assistance programs. In 1970, these loans carried substantially lower average interest rates than commercial loans, but, by the end of the decade, rates on loans to finance purchases of military equipment and services, some agricultural loans, and many loans of the Export-Import Bank had approached market rates. In 1978-80, receipts also included significant earnings on U.S. Government holdings of foreign currencies.

**Payments.**—Government investment income payments were \$12.5 billion in 1980, compared with \$1.0 billion in 1970; the average annual rate of increase was 32 percent. Payments mostly reflected fluctuations in foreign monetary authorities' holdings of U.S. Government securities; these holdings were

affected by exchange market intervention activities by these authorities and by their investment decisions, particularly by OPEC members after the sharp increase in petroleum prices led to large accumulations of their investible funds.

By area, payments to Western Europe—mainly Germany and, to a lesser extent, the United Kingdom,

France, and Switzerland—accounted for about 50 to 60 percent of total Government payments in 1970–80. Payments to Japan increased rapidly and accounted for about 15 percent in 1980, compared with 8 percent in 1970. Payments to all these countries largely reflected their accumulation of dollars as a result of intervention purchases to

limit the appreciation of their currencies against the dollar. Payments to developing countries in Asia and Africa were 22 percent of all Government payments in 1980, compared with 7 percent; they were largely to OPEC members. The share of total payments to other countries and international organizations declined.

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nuity period for the purpose of computing the interest element of the annuity, and the amount determined by such proration is nontaxable. However, the amount of an annuity installment that exceeds this prorated portion is the interest element that is taxable and included in AGI of IRS.

Interest income received by minors from savings accounts and from U.S. savings bonds in their name is included in BEA-derived AGI. A minor, like an adult, is taxable for his wages and for the income received from nonwage sources. However, when the total income of a minor is less than the minimum re-

quiring a tax return, it is likely that such income is not reported to the IRS, especially when taxes are not withheld from the wage sources. Also, if a minor is under 19 or a student and qualifies as a dependent of his parents, a tax return is required only when unearned income exceeds \$1,000. (Interest received by a minor is most likely to be reported when he received wages subject to withholding and files a tax return to secure a refund.) Interest received by minors could be substantial and it is probably the nonwage income source from which minors not required to file most often derive income.

When U.S. savings bonds are purchased in a minor's name by the parent, the availability of the option of reporting the interest earnings on the accrual accounting method makes it unlikely that the interest earned will be reported to the IRS unless the minor's total amount of taxable interest accruing each year exceeds the minimum requiring a tax return.

Interest earned on individual retirement accounts (IRA's) is included in BEA-derived AGI, but not included as interest in AGI of IRS. Instead, such earnings are reported as pensions and annuities in the year the funds are withdrawn.